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SOCIAL COST OF ACCIDENT, IGNORANCE AND EXHAUSTION

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Very properly the National Child Labor Committee is compelling the public to fix attention on the child laborer, especially the little wage-earner in the mine, mill and factory. In doing this we are led to consider all the factors which affect the child for weal or woe, not only in the work-place but elsewhere. You have asked me to discuss the "Social Cost of Accident, Ignorance and Exhaustion," no doubt with reference to causes and also with a view to prevention, protection, insurance and instruction.

A representative of the new Southwest urges upon the people of Texas the establishment of "a cotton mill in the cotton field." A vigorous, far-seeing, progressive community will not be content to ship cheap raw material to older countries and bring it back as finished goods at high prices for transportation, labor and profits. But cotton mills in the cotton fields mean an industrial revolution in the South similar in all essential respects to that through which England, Germany and some of our own older states have passed on their way from rural to urban industries. In this revolution the child will suffer unless protected by law.

Antecedents of the Exploited Child

The studies of Niceforo, Warner, Oppenheim, and by boards of education in Switzerland, England, America and elsewhere, have made one point clear—the delinquent, dependent, neglected child is physically and intellectually inferior, on the average, to the normal school child. This established fact compels us to go back to influences which affect the development of the very poor child before birth and in the years of infancy.

In great measure we are dealing with the results of generations of social neglect. Our ancestors have permitted multitudes of human

beings to grow up under the blinding and perverting influence of a *laissez faire* philosophy, a theory made to excuse, justify and glorify neglect. The more conscientious and logical they were who held this theory the worse the results. Consequently we are called upon to deal with the offspring of the ignorant, underpaid, neglected, often vicious and depraved, alcoholic, narcotized, neurotic ancestors.

The conditions of motherhood and infancy affect the child's chances in life. Whether born crippled or normal, the children of the poor, ignorant and neglected, begin again a round of deficient nutrition and care. The factory girl, without instruction and training, becomes a mother under serious difficulties, and if her infants survive, they enter the struggle for existence too early and with a heavy handicap. The mother's history is written in deeper, darker lines in the baby. During her childhood, deprived of play and school, she failed to accumulate physiological reserves; during her early adolescence she was ill-fed, poorly nourished, ill-taught, overworked. Before the birth of her infant, while it was directly and completely dependent on her for life and growth, she had not good food, and her energies were depleted by toil. During the months before weaning time she was unfit for her function as nurse. These conditions explain the frightful rate of infant mortality among the very poor and ignorant, and the prevalence of disease and death in later years, with the diminished industrial efficiency of adult wage earners.

The fated circle begins again with each new generation of weaklings. You will not find all this in the statistics of "factory labor," but must seek the information elsewhere. The condition of the mother *enceinte* affects her offspring. Insufficient nutrition and excessive toil have for their results either the death of the embryo, or premature birth, and in any case constitutional feebleness of the child results, later showing itself in diminished resistance to disease or in defect in some organ.

In Belgium, in the period 1890-1900, 44.9 in 1,000 births were dead born. Among working people, in industrial centers, the ratio is high. In 1900 in Prussia, out of 1,275,712 births, 39,993 were dead born; in Switzerland in a total of 97,695 births, 3,379 were dead born; in France, of 827,297 births, 39,246 were dead born. Unless sickness insurance is organized to provide support during the latter part of pregnancy and after confinement of the mother, it

is impossible to enforce a law forbidding very poor women at their time of need to work for wages.¹

Mr. Louis D. Brandeis, in his brief before the Supreme Court of the United States, in October, 1907, in the case *Curt Muller vs. State of Oregon*, has collected a mass of expert testimony from physicians, factory inspectors and statisticians, proving beyond reasonable ground for doubt that too prolonged terms of work are destructive of the health of working women and ruinous to their offspring; and in February, 1908, the Supreme Court of the United States heeded this testimony and it became a part of the legal opinion of our highest judicial body. It is now good law that the courts are bound to recognize the verdict of science and not merely abide by outworn precedents; that judges can look forward to consequences, as well as backward to prejudices based on ignorance.²

The surroundings of the child in school from the sixth to the fourteenth year are frequently part cause of the subsequent exhaustion of energy and industrial efficiency. The school ought to be, can be, and sometimes is, a training in physical development. A child properly educated, in the widest and best sense of that term, does grow in stature, weight and force. Every school should be under the control of medical authorities who should have the children weighed, measured and tested by modern instruments of precision so as to make physical development certain. As a matter of

¹The French association for the legal protection of workpeople adopted this resolution January 29, 1903:

"That in establishments supervised by factory inspectors the work of pregnant women, or those recently confined, should be regulated as follows: 1. Women should not be permitted to work during the two months preceding confinement. 2. Pregnant women should be permitted to ask for cessation of work before their approaching confinement without breaking the work contract. 3. Administrative regulations should determine the different kinds of work which are to be interdicted or permitted only on certain conditions to pregnant women or those recently confined.

"The strict application of a law relating to obligatory rest of pregnant women or those recently confined can be made only when the loss of wages is compensated by relief at the charge of the state or local funds, in the absence of a general system of industrial insurance guaranteeing legal indemnities."

²The language and doctrine of the decision of the Supreme Court (*Curt Muller vs. State of Oregon*) apply with all their weight to the laws protecting children. Justice Brown wrote: "That woman's physical structure and the performance of maternal functions place her at a disadvantage in the struggle for subsistence is obvious. This is especially true when the burdens of motherhood are upon her. Even when they are not, by abundant testimony of the medical fraternity, continuance for a long time on her feet at work, repeating this from day to day, tends to injurious effects upon the body, and as healthy mothers are essential to vigorous offspring, the physical well-being of women becomes an object of public interest and care in order to preserve the strength and vigor of the race."

fact, these scientific tests are rarely applied, and merely intellectual instruction is given, with waning power, to children whose health is undermined in the process.

In our crowded cities the playgrounds for outdoor exercise and play are inadequate, the play itself is left to the untaught children, the school house is often closely packed, the desks and mode of instruction deform the children, the air is vitiated, the light is uncertain, the physical care of the pupils not supervised by competent medical and dental examiners.

There is relatively too great reliance on books and writing; too little directed and educational play and creative activity. Competitive examinations, frequent and severe, are conducted in such fashion as to over-excite the nervous system and induce sleeplessness, fear and exhaustion. Frequently the children come to school inadequately fed and clothed; they have slept ill in the noisy, stifling tenement dwelling; they may have worked long outside the school hours and so are weary and sleepy. School life goads them to self-destruction.

Situation of the Child and Youth as a Wage-Earner

We still lack a thorough statistical study, with intensive local investigations, but, thanks to the federal government and the Charities and Commons organization, we shall soon have a more reliable presentation of the facts. We already have ample medical information for a fair judgment of the effects of premature factory labor, and the experience of older countries has value for us.

It is certain that exhaustion by fatigue is to be charged with a very great number of occupational accidents. Children and youth placed in positions which require maturity of muscles, nerves and judgment are necessarily heedless and awkward. They endanger themselves and others, especially when they are weary. The records of accidents by age and by hour of the day are significant in this connection.³

Premature child labor in mine, mill and factory increases exposure to some occupational diseases. Certain poisons, dust, vapors and germs may be resisted or tolerated by vigorous men which are fatal to young persons and women. This fact has led to the prohibition of work by such persons under the conditions cited.

³Querton, *L'Augmentation du Rendement*, etc., p. 172.

Social Value of the Laborer

In order to realize the cost of unsuitable occupation and neglect of education, we must try to set before us, at least approximately, the value to society of a healthy, intelligent, open-minded, well-fed worker. It is not possible to do this with great accuracy, for the range of individual variation is very great. Rochard⁴ estimates the economic value of a man at 1,097 fr.—about \$219 per year. Mr. Frederick L. Hoffman⁵ defines the “economic gain to society” to be “the value of the product over and above wages, cost of supervision, cost of material and miscellaneous expenses, necessarily incurred to carry on any particular process of manufacture or industry.” He thinks that the average annual economic gain may be safely placed at about \$300, so that if the child of fifteen has a prospect of working up to the age of sixty-five his “future economic value” for the active and productive fifty years will be \$15,000. At twenty-five this future economic value will be \$13,695.

But is this economic, material estimate, calculated in price, the only form of social value we can consider? We need not be sentimentalists to insist that the military and political position of our nation among the nations of the earth is due largely to the number of vigorous, alert and intelligent children brought to productive and reproductive years. How can we adequately set before the country the priceless value of a host of young citizens? Can we utterly ignore the social value of this multitude of hopeful youth as held in the hearts of the mothers and fathers of our land? Because we cannot weigh and measure the love of parents, brothers and sisters, shall we therefore not count affection among the most precious possessions of our people? When a man has to choose between money and the life of his child he welcomes bankruptcy and is glad to make the offering.

Social Cost of Accident and Exhaustion

Let us approach the social cost of accident, exhaustion and ignorance,—the causes of morbidity and mortality,—upon the basis of this estimate of the value of a life at fifteen years. What is it we fling away when we take a normal child, rob it of intelligence, stunt its faculties, kill it prematurely, cut off twenty or more years

⁴*La Valeur économique de la vie humaine*, Paris, 1885.

⁵*Annals of American Academy*, May, 1906.

of its existence, or make it a weakling, a dependent on society for years of its existence in almshouse or prison?

The economic loss is measured by the economic social value of a healthy human being once brought to maturity and educated for usefulness. Death destroys the accumulated energy of youth at a stroke; but feebleness and degeneration burden the community with partial or entire support of a weakling or cripple. Therefore to find out the total social cost we must calculate as nearly as possible the loss by death, the loss by sickness and incapacity, the positive burden of support of paupers and the enormous waste and cost of caring for criminals driven to revolt.⁶ The community has already expended much on a child before it is ten years of age,—in government protection, playgrounds, schools, sanitation. Is it economic to permit private and individual greed to use up this investment?⁷

Consider the social loss of exploited childhood from the standpoint of capitalists as a permanent class, men who have investments for life and seek sources of income for their descendants to

⁶Many attempts have been made by sanitarians to exhibit and illustrate these social wastes. In Germany in 1879-1888 an average of 26.90 in 1,000 died; in 1889-1898, only 23.97; a gain of 2.93 per 1,000; 150,000 less deaths in a population of 52,000,000. The economic gain was 130,000,000 marks (\$32,600,000) annually. But for every death there are thirty-four cases of sickness, twenty days' lost time each; 150,000 multiplied by 34 by 20 equals 1,000,000,000 days of sickness, or 300,000,000 marks (\$75,000,000) saved.

Dr. John Simon estimates for England the economic gain by reduction of mortality at 125,000 persons a year; \$800 per head; \$60,000,000 saved in days of sickness; in all \$160,000,000. In 1897 in Germany about eight and a half millions of persons were insured against sickness, one-sixth of all population. To each insured, 0.36 cases of illness; 6.18 days lost; 14.45 marks (\$3.61) cost; total cost, 120,000,000 marks (\$30,000,000); and also as much loss of wages. If sickness could be reduced by hygienic and sanitary improvement by 5 per cent then 6,000,000 marks (\$1,500,000) would be saved plus wages of same amount; in all \$3,000,000.

⁷The productivity of capital depends on several factors: 1. On scientific mastery of the laws of natural forces and materials; 2. On the invention and use of the most perfect tools, machines and technical processes; 3. On the perfection of the organization and discipline of the factory, mill or shop; 4. On the selection of the raw material and arrangement of the plan of manufacture; 5. On the health, energy, intelligence and hearty co-operation of the workmen. It is this last factor which with us is too much neglected, the most important of all.

The supply of energy in the worker is furnished by the oxydation of the elements of food. This supply varies with the sufficiency of quantity, the "balance of rations," the digestibility and appetizing quality of food, and the condition of the worker.

The girls need to learn to select and prepare food: hence should be given time and instruction for this social task. To deprive them of this training by keeping them in factory or mercantile establishment is to lower the vitality of the coming generation.

the tenth generation. Can this class, however selfish, afford to permit the exhaustion of labor force in one generation? Human labor supply must be continuous, simply as a tool of capital. Granted that an individual employer may make money by the exhaustion of children, the group of employers cannot.

It is said that certain Indians will sell their hammocks cheap in the morning! In Canada a group of aborigines were furnished seed potatoes and shown how to plant them; but as soon as the teacher was gone these thriftless and improvident people dug up the precious seed and feasted on it. Winter seemed so far away. That is the tillage of fools which takes plant food out of the soil in a short series of crops and leaves it barren. The individualistic owners of the forests of Michigan and Wisconsin made themselves rich by destroying the primeval woods and they bequeathed to their heirs a desert covered with the black trunks left by conflagration. Shall this mad policy be extended to the present crop of human workers?

Let every chivalrous man listen one moment to another argument from cost, the cost to mothers! They have a right to be heard here. Their sufferings, anxieties and sacrifices are vastly greater than those of all the soldiers who ever were praised for valor and voluntary sufferings; for all mothers are martyrs. When we become more fully civilized we shall by insurance—as in Germany—provide for their support during the time when the birth and nursing of their infants require all their vitality. We may go further even than that, and recognize the service of child-bearing as a true economic service to the nation.

Connection between Accident, Exhaustion and Ignorance

Ignorance obscures the vision of social value and of cost in parents. It is inconceivable that poor parents would crucify their young children if they only knew the effect of premature labor. When the late Dr. Budin taught ignorant mothers in Paris that the death of their infants was not necessary if they followed his directions they all heeded him; not one case of neglect,—yet poverty pressed them sorely.

The arguments published by mill owners show that they are ignorant—I will not say always wilfully ignorant—of the effects of factory and mill labor in England, Germany, France and all other

older industrial nations. There is no other explanation of their neglect short of a charge of sheer brutality. Ignorance of the general public, of legislators, of teachers, of lawyers, of governors, of preachers and editors, is in great measure the cause of our criminal negligence as a people. Ignorance permits accidents which might be prevented. Ignorance permits occupational diseases and exhaustion which might be diminished. Ignorance permits neglect of insurance which would provide funds for care, lead to precautions and diminish the burden of starvation conditions. The total situation calls for a prolonged campaign of education of teachers, pastors, workmen, and employers in the findings of the science of hygiene and sanitation and of general social protection.